



SEQUENCE LISTING

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Dzionic, Andrzej
Buck, David William

<120> ANTIGEN BINDING FRAGMENTS SPECIFIC FOR DENDRITIC CELLS COMPOSITIONS
AND METHODS OF USE THEREOF ANTIGENS RECOGNIZED THEREBY AND CELLS
OBTAINED THEREBY

<130> 212302001100

<140> US 09/714,712

<141> 2000-11-15

<150> US 60/197,205

<151> 2000-04-13

<150> US 60/196,824

<151> 2000-04-11

<150> US 60/180,775

<151> 2000-02-07

<150> US 60/179,003

<151> 2000-01-28

<150> US 60/167,076

<151> 1999-11-23

<150> US 60/165,555

<151> 1999-11-15

<160> 38

<170> PatentIn version 3.0

<210> 1

<211> 1312

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(1312)

<223> BDCA-2 cDNA sequence

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ttggctaatt ttttgattt ttagtagaga tggggtttca ctatgttggc caggctagtc 120

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ttgaactcct ggcctgaagc aatccgcccc cctcagcctc ccaaagtgt gagattatag 180
gcacgagcca ctacacctgg ccacaaaatt ctttaaagaa gccaatccca tcctccctca 240
agagccaagg ggccacctca ccctcttggt acagcagatc ctgcctccac agtcaccctg 300
ctcccaagtg caacctctgt ctgacctgc atgggtgtgcg gtgccctcct gcctcaggcc 360
gcgaagaagg atctaagggc ttggcttggt tgaaagaacc acaccccgaa agtaacatct 420
ttggagaaag tgatacaaga gcttctgcac ccacctgata gaggaagtcc aaaggggtgtg 480
cgcacacaca atgggtgcctg aagaagagcc tcaagaccga gagaaaggac tctggtggtt 540
ccagttgaag gtctggtcca tggcagtcgt atccatcttg ctctcagtgt tctgtttcac 600
tgtgagttct gtggtgcctc acaattttat gtatagcaaa actgtcaaga ggctgtccaa 660
gttacgagag tatcaacagt atcatccaag cctgacctgc gtcatggaag gaaaggacat 720
agaagattgg agctgctgcc caacccttg gacttcattt cagtctagtt gctactttat 780
ttctactggg atgcaatctt ggactaagag tcaaaagaac tgttctgtga tgggggctga 840
tctggtggtg atcaacacca gggaagaaca ggatttcac attcagaatc tgaaaagaaa 900
ttctttctat tttctggggc tgtcagatcc aggggggtcgg cgacattggc aatgggttga 960
ccagacacca tacaatgaaa atgtcacatt ctggcactca ggtgaaccca ataaccttga 1020
tgagcgttgt gcgataataa atttccgttc ttcagaagaa tggggctgga atgacattca 1080
ctgtcatgta cctcagaagt caatttgcaa gatgaagaag atctacatat aaatgaaata 1140
ttctccctgg aaatgtgttt gggttggcat ccaccgttgt agaaagctaa attgattttt 1200
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<210> 2

<211> 213

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (1)..(213)

<223> amino acid sequence of one of the isoforms of BDCA-2 with all six exons expressed

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Ser Val Cys Phe Thr Val Ser Ser Val Val Pro His Asn Phe Met Tyr
35 40 45
Ser Lys Thr Val Lys Arg Leu Ser Lys Leu Arg Glu Tyr Gln Gln Tyr
50 55 60
His Pro Ser Leu Thr Cys Val Met Glu Gly Lys Asp Ile Glu Asp Trp
65 70 75 80
Ser Cys Cys Pro Thr Pro Trp Thr Ser Phe Gln Ser Ser Cys Tyr Phe
85 90 95
Ile Ser Thr Gly Met Gln Ser Trp Thr Lys Ser Gln Lys Asn Cys Ser
100 105 110
Val Met Gly Ala Asp Leu Val Val Ile Asn Thr Arg Glu Glu Gln Asp
115 120 125
Phe Ile Ile Gln Asn Leu Lys Arg Asn Ser Ser Tyr Phe Leu Gly Leu
130 135 140
Ser Asp Pro Gly Gly Arg Arg His Trp Gln Trp Val Asp Gln Thr Pro
145 150 155 160
Tyr Asn Glu Asn Val Thr Phe Trp His Ser Gly Glu Pro Asn Asn Leu
165 170 175
Asp Glu Arg Cys Ala Ile Ile Asn Phe Arg Ser Ser Glu Glu Trp Gly
180 185 190
Trp Asn Asp Ile His Cys His Val Pro Gln Lys Ser Ile Cys Lys Met
195 200 205
Lys Lys Ile Tyr Ile
210

<210> 3
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<212> DNA
<213> Mus musculus
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<221> CDS
<222> (146)..(775)
<223> coding sequence of mouse Dectin-2

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<309> 2000-05-02
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gacctttctga acatacacct caaca atg gtg cag gaa aga caa tcc caa ggg 172
Met Val Gln Glu Arg Gln Ser Gln Gly
1 5
aag gga gtc tgc tgg acc ctg aga ctc tgg tca gct gct gtg att tcc 220
Lys Gly Val Cys Trp Thr Leu Arg Leu Trp Ser Ala Ala Val Ile Ser
10 15 20 25
atg tta ctc ttg agt acc tgt ttc att gcg agc tgt gtg gtg act tac 268
Met Leu Leu Leu Ser Thr Cys Phe Ile Ala Ser Cys Val Val Thr Tyr
30 35 40
caa ttt att atg gac cag ccc agt aga aga cta tat gaa ctt cac aca 316
Gln Phe Ile Met Asp Gln Pro Ser Arg Arg Leu Tyr Glu Leu His Thr
45 50 55
tac cat tcc agt ctc acc tgc ttc agt gaa ggg act atg gtg tca gaa 364
Tyr His Ser Ser Leu Thr Cys Phe Ser Glu Gly Thr Met Val Ser Glu
60 65 70
aaa atg tgg gga tgc tgc cca aat cac tgg aag tca ttt ggc tcc agc 412
Lys Met Trp Gly Cys Cys Pro Asn His Trp Lys Ser Phe Gly Ser Ser
75 80 85
tgc tac ctc att tct acc aag gag aac ttc tgg agc acc agt gag cag 460
Cys Tyr Leu Ile Ser Thr Lys Glu Asn Phe Trp Ser Thr Ser Glu Gln
90 95 100 105
aac tgt gtt cag atg ggg gct cat ctg gtg gtg atc aat act gaa gcg 508
Asn Cys Val Gln Met Gly Ala His Leu Val Val Ile Asn Thr Glu Ala
110 115 120
gag cag aat ttc atc acc cag cag ctg aat gag tca ctt tct tac ttc 556
Glu Gln Asn Phe Ile Thr Gln Gln Leu Asn Glu Ser Leu Ser Tyr Phe
125 130 135
ctg ggt ctt tcg gat cca caa ggt aat ggc aaa tgg caa tgg atc gat 604
Leu Gly Leu Ser Asp Pro Gln Gly Asn Gly Lys Trp Gln Trp Ile Asp
140 145 150
gat act cct ttc agt caa aat gtc agg ttc tgg cac ccc cat gaa ccc 652
Asp Thr Pro Phe Ser Gln Asn Val Arg Phe Trp His Pro His Glu Pro
155 160 165
aat ctt cca gaa gag cgg tgt gtt tca ata gtt tac tgg aat cct tcg 700
Asn Leu Pro Glu Glu Arg Cys Val Ser Ile Val Tyr Trp Asn Pro Ser
170 175 180 185
aaa tgg ggc tgg aat gat gtt ttc tgt gat agt aaa cac aat tca ata 748
Lys Trp Gly Trp Asn Asp Val Phe Cys Asp Ser Lys His Asn Ser Ile
190 195 200

tgt gaa atg aag aag att tac cta tga gtgcctgtta ttcattaata 795
 Cys Glu Met Lys Lys Ile Tyr Leu
 205
 tcttttaaagt tcagacctac caagaagcca taacttcttg gcctgtacat ctgacagagg 855
 ccgttctttt cctagccact attctttact caaacagaat gagccctttc tcctttctgat 915
 ggtagagatt ttgtcaactt gacacaaact agagtcacct ggggagtagg atcttcagct 975
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 gggagcatca tccatccatc tctgcctca ggtttctgcc ccagggtctt gccttggttt 1155
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 aaaaaaaaaa aa 1227

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 <213> Mus musculus

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 Phe Ile Ala Ser Cys Val Val Thr Tyr Gln Phe Ile Met Asp Gln Pro
 35 40 45
 Ser Arg Arg Leu Tyr Glu Leu His Thr Tyr His Ser Ser Leu Thr Cys
 50 55 60
 Phe Ser Glu Gly Thr Met Val Ser Glu Lys Met Trp Gly Cys Cys Pro
 65 70 75 80
 Asn His Trp Lys Ser Phe Gly Ser Ser Cys Tyr Leu Ile Ser Thr Lys
 85 90 95
 Glu Asn Phe Trp Ser Thr Ser Glu Gln Asn Cys Val Gln Met Gly Ala
 100 105 110
 His Leu Val Val Ile Asn Thr Glu Ala Glu Gln Asn Phe Ile Thr Gln
 115 120 125
 Gln Leu Asn Glu Ser Leu Ser Tyr Phe Leu Gly Leu Ser Asp Pro Gln
 130 135 140

Gly Asn Gly Lys Trp Gln Trp Ile Asp Asp Thr Pro Phe Ser Gln Asn
 145 150 155 160
 Val Arg Phe Trp His Pro His Glu Pro Asn Leu Pro Glu Glu Arg Cys
 165 170 175
 Val Ser Ile Val Tyr Trp Asn Pro Ser Lys Trp Gly Trp Asn Asp Val
 180 185 190
 Phe Cys Asp Ser Lys His Asn Ser Ile Cys Glu Met Lys Lys Ile Tyr
 195 200 205
 Leu

<210> 5
 <211> 237
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (1)..(237)
 <223> amino acid sequence of human DCIR

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 <308> AJ133532
 <309> 1999-09-01
 <313> (1)..(237)

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 Thr Ala Pro His Lys Ser Asn Thr Gly Phe Pro Lys Leu Leu Cys Ala
 35 40 45
 Ser Leu Leu Ile Phe Phe Leu Leu Ala Ile Ser Phe Phe Ile Ala
 50 55 60
 Phe Val Ile Phe Phe Gln Lys Tyr Ser Gln Leu Leu Glu Lys Lys Thr
 65 70 75 80
 Thr Lys Glu Leu Val His Thr Thr Leu Glu Cys Val Lys Lys Asn Met
 85 90 95
 Pro Val Glu Glu Thr Ala Trp Ser Cys Cys Pro Lys Asn Trp Lys Ser
 100 105 110

Phe Ser Ser Asn Cys Tyr Phe Ile Ser Thr Glu Ser Ala Ser Trp Gln
 115 120 125
 Asp Ser Glu Lys Asp Cys Ala Arg Met Glu Ala His Leu Leu Val Ile
 130 135 140
 Asn Thr Gln Glu Glu Gln Asp Phe Ile Phe Gln Asn Leu Gln Glu Glu
 145 150 155 160
 Ser Ala Tyr Phe Val Gly Leu Ser Asp Pro Glu Gly Gln Arg His Trp
 165 170 175
 Gln Trp Val Asp Gln Thr Pro Tyr Asn Glu Ser Ser Thr Phe Trp His
 180 185 190
 Pro Arg Glu Pro Ser Asp Pro Asn Glu Arg Cys Val Val Leu Asn Phe
 195 200 205
 Arg Lys Ser Pro Lys Arg Trp Gly Trp Asn Asp Val Asn Cys Leu Gly
 210 215 220
 Pro Gln Arg Ser Val Cys Glu Met Met Lys Ile His Leu
 225 230 235

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 <213> Artificial Sequence
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 <223> basic unit of a linking peptide

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 <223> primer

<400> 7
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<210> 8
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 <213> Artificial Sequence

<220>
<223> primer

<400> 8
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24

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<213> Homo sapiens

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Asn Cys Ser Val
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Asn Ser Ser Tyr
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Asn Val Thr Phe
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<213> Mus musculus

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Asn Glu Ser Leu
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<213> Homo sapiens

<400> 13

Asn Glu Ser Ser

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Lys Arg Leu Ser

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Lys Lys Thr Thr

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<211> 4

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Thr Arg Glu Glu

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Ser Ser Glu Glu

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<212> PRT

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Ser Thr Ser Glu

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Thr Glu Ala Glu

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Ser Ile Cys Glu

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Thr Tyr Ala Glu

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Thr Thr Lys Glu

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Thr Thr Leu Glu

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Ser Glu Lys Asp

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Thr Gln Glu Glu

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<210> 28

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<222> (1)..(8)

<223> Tyrosine kinase phosphorylation site in human BDCA-2

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<211> 4

<212> PRT

<213> Homo sapiens

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Ser Val Cys Glu
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<210> 30

<211> 4

<212> PRT

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<400> 30

Ser Val Cys Glu
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<210> 31

<211> 9

<212> PRT

<213> Mus musculus

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<221> UNSURE

<222> (1)..(9)

<223> Tyrosine kinase phosphorylation site in mouse dectin-2

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<211> 4

<212> PRT

<213> Homo sapiens

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Gly Gly Arg Arg
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<213> Mus musculus

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<222> (1)..(6)
<223> N-myristylation site in mouse dectin-2

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Gly Val Cys Trp Thr Leu
1 5

<210> 34
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<220>
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<223> N-myristylation site in mouse dectin-2

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<210> 35
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<223> N-myristylation site in mouse dectin-2

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<212> PRT
<213> Homo sapiens

<220>
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 <223> N-myristylation site in human DCIR

<400> 36

Gly Ile Asn Thr Ala Ser
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<210> 37
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 <213> Unknown

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 <223> consensus ITIM motif

<220>
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 <222> (2)..(5)
 <223> consensus immunoreceptor tyrosine-based inhibitory motif
 (ITIM motif) (I/V)XYXX(L/V),
 amino acid "X" from position 2, 4 and 5 can be any amino acid

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 <222> (1)..(1)
 <223> amino acid "X" at position 1 can be either amino acid "I " or "V"

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> amino acid "X" at position 6 can be either amino acid "L " or "V"

<400> 37

Xaa Xaa Tyr Xaa Xaa Xaa
 1 5

<210> 38
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 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (1)..(6)
 <223> immunoreceptor tyrosine-based inhibitory motif (ITIM motif) in
 DCIR

<400> 38

Ile Thr Tyr Ala Glu Val
1 5